## REMARKS/ARGUMENTS

In order to meet their duty of disclosure, the Applicants submit herewith a Supplemental Information Disclosure Statement setting forth additional published patents and patent applications regarding green fluorescent proteins.

The Applicants request that the previous obviousness-type double patenting rejections be held in abeyance until such time as the Examiner has indicated the claims to be otherwise free of the newly cited art.

The Applicants also provide a clean copy of the previously provided IDS whose references have already been considered, but which would not have been listed on any patent to issue absent the submission of the enclosed clean copy.

To address the objections to claim 144, the Applicants have amended the claim to place it independent claim format as suggested by the Examiner.

To address the objections to claims 145 and 146, the Applicants have amended claims 145 and 146 for purposes of clarity. Claims 145 and 146 have also been amended to depend from claim 143.

Claims 188 to 190 are new. Support for their recitals of at least 85%, 90% and 95% identity, respectively, is found in the specification at page 22, second full paragraph. In view of the above, the Applicants believe the amendments to the claims add no new matter and respectfully request their entry.

Accordingly, claims 143 to 146, 148 to 153, 188 and 190 are now presented for examination on the merits.

Appl. No. 10/620,099 Amdt. dated February 12, 2007 Reply to Office Action of January 9, 2006 and Notice of Appeal filed on August 10, 2007

## **CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are otherwise in condition for allowance.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5000.

Respectfully submitted,

Frank J. Mycroft Reg. No. 46,946

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, Eighth Floor San Francisco, California 94111-3834 Tel: 925-472-5000 Fax: 415-576-0300

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## ATTACHMENT

Substitute for form 1449A/PTO		Complete if Known		
			Application Number	10/620,099
NFORMATIO	N DISCLOS	SURE	Filing Date	July 14, 2003
STATEMENT BY APPLICANT			First Named Inventor	Wachter, Rebekka M.
			Art Unit	1656
(Use as many :	sheets as necessary	)	Examiner Name	Nashaatt T. Nashed
et 1	of	4	Attorney Docket Number	026069-151480US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number Kind Code <sup>2 (f known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-5,491,084	02/13/1996	Chalfie et al.	
	AB	US-5,625,048	04/29/1997	Tsien et al.	
	AC	US-5,777,079	07/07/1998	Tsien et al.	
	AD	US-5,795,737	08/18/1998	Seed et al.	- 1
	AE	US-5,804,387	09/08/1998	Cormack et al.	

	FOREIGN PATENT DOCUMENTS							
Examiner	Cite			Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages		
Initials*	No.'	Country Code <sup>3</sup>	Number⁴	Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	T <sup>6</sup>
	AF	PCT	WO 91/01305		02/07/1991	-		
	AG	PCT	WO 95/07463		03/16/1995			
	АН	PCT	WO 95/21191		08/10/1995	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT		
	Al	PCT	WO 96/23810	***************************************	08/08/1996			
······	AJ	PCT	WO 96/27027		09/06/1996			
·····	AK	PCT	WO 96/23898		08/08/1996			
	AL	PCT	WO 96/27675		09/12/1996			
	АМ	PCT	WO 97/11094		03/27/1997			
	AN	PCT	WO 97/26333		01/17/1997			
	AO	PCT	WO 97/28261		08/07/1997			
	AP	PCT	WO 97/42320		05/07/1997			

Examiner	Date
Signature	Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. 60978171 v1

Substitute	for form 1449B/PTO			Complete if Known		
				Application Number	10/620,099	
INFO	RMATION DIS	CLOS	URE	Filing Date	July 14, 2003	
STAT	EMENT BY A	PPLIC	ANT	First Named Inventor	Wachter, Rebekka M.	
				Art Unit	1656	
,	(Use as many sheets as i	necessary)		Examiner Name	Nashaatt T. Nashed	
Sheet	2	of	4	Attorney Docket Number 026069-151480US		

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)
AC	et al., <i>Proc. Natl. Acad. Sci.</i> , <b>93</b> :8362-8367 (1996)
AF	Baldwin et al., <i>Biochemistry</i> , <b>29</b> :5509-5915 (1990)
AS	Chalfie et al., <i>Science</i> , <b>263</b> :802-804 (1994)
AT	Cheng et al., Nature Biotechnology, 14:606-609 (1996)
AL	Cody et al., <i>Biochemistry</i> , <b>32</b> :1212-1218 (1993)
A\	Cormack et al., <i>Gene</i> , <b>173</b> :33-38 (1995)
AV	/ Crameri et al., <i>Nature Biotech</i> ., <b>14</b> :315-319 (1996)
A)	Cubin et al., <i>Trends in Biochem. Sci.</i> , <b>20</b> :488-455 (1995)
A	Delagrave, S. et al., "Searching sequence space to engineer proteins, exponential ensemble mutagenesis," <i>Bio Technology</i> , <b>11</b> :1548-1552 (December 1993)
AZ	Delagrave, S. et al., <i>Bio/Technology</i> , <b>13</b> :151-154 (1995)
ВА	Dickson et al., <i>Science</i> , <b>274</b> :966-969 (1996)
В	Ehrig et al., <i>FEBS Letters</i> , <b>367</b> :163-166 (1995)
В	Elsliger, Marc-Andre et al., "Structural and Spectral Response of Green Fluorescent Protein Variants to Changes in pH," <i>Biochemistry</i> , Vol. 38, Pages 5296-5301 (1999)

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Date	
Considered	
	Date Considered

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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				Application Number	10/620,099	
INFO	RMATION DIS	CLOS	SURE	Filing Date	July 14, 2003	
STA	<b>TEMENT BY A</b>	PPLIC	CANT	First Named Inventor	Wachter, Rebekka M.	
				Art Unit	1656	
	(Use as many sheets as i	necessary)		Examiner Name	Nashaatt T. Nashed	
Sheet	3	of	4	Attorney Docket Number	026069-151480US	

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)
ВІ	Giuliano et al., Ann. Rev. Biophys. Biomol. Struc., 24:405-435 (1995)
ВІ	Heim et al., Current Biology, <b>6</b> :178-182 (February 1996)
ВІ	Heim et al., <i>Nature</i> , <b>373</b> :663-664 (1995)
В	G Heim et al., <i>Proc. Natl. Acad. Sci.</i> , <b>91</b> :12501-12505 (1994)
ВІ	Houye and Tsuji, <i>FEBS Letter</i> s, <b>341</b> :277-280 (1994)
В	Jayaraman, Sujatha et al., "Mechanism and Cellular Applications of a Green Fluorescent Proteinbased Halide Sensor," <i>J. Biol. Chem.</i> , 275(9) 6047-6050 (2000)
В.	Kain et al., <i>BioTechniques</i> , <b>19</b> :650-655 (1995)
ВІ	Levine et al., Comp. Biochem. Physiol., 728:77-85 (1982)
BI	Mitra et al., <i>Gene</i> , <b>173</b> :13-17 (1996)
В	Muhirad et al., Yeast, <b>8</b> :79-82 (1992)
ВІ	N Niws et al <i>Proc. Natl. Acad. Sci.</i> , <b>93</b> :13617-13622 (1996)
В	Norris, et al., <i>Plant Molecular Biology</i> , <b>24</b> :673-677 (1994)
ВІ	P Ormo et al., <i>Science</i> , <b>273</b> :1392-1395 (1996)

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	Examiner		Date	
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1	Signature		Considered	

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INFORMATION DISCLOSURE					Filing Date	July 14, 2003	
	STATEMENT BY APPLICANT				First Named Inventor	Wachter, Rebekka M.	
					Art Unit	1656	
	(4	Use as many sheets as r	necessary)		Examiner Name	Nashaatt T. Nashed	
	Sheet	4	of	4	Attorney Docket Number	026069-151480US	

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)
BQ	Palm et al., <i>Nature Struct. Biol.</i> , <b>4</b> :361-365 (1997)
BR	Perozzo et al., <i>J. Biol. Chem.</i> , <b>263</b> :7713-7716 (1988)
BS	Prasher et al., <i>Gene</i> , <b>111</b> :229-233 (1992)
вт	Roth Thesis from the graduate program in Biochemistry from Rutgers, the state University of New Jersey (October 1985)
BU	Wachter, Rebekka M. et al., "Crystal Structure and Photodynamic Behavior of the Blue Emission Variant Y66H/Y145F of Green Fluorescent Protein," <i>Biochemistry</i> , Vol. 36, Pages 9759-9765 (1997)
BV	Wachter, Rebekka M. et al., "Sensitivity of the Yellow Varian of Green Fluorescent Protein to Halides and Nitrate," <i>Current Biology</i> , Vol. 9, No. 17, Pages R628-R629 (1999)
BW	Wachter, Rebekka M. et al., "Structural Basis of Spectral Shifts In the Yellow-emission Variants of Green Fluorescent Protein," <i>Structure</i> , Vol. 6, No. 10, Pages 1267-1277 (1998)
вх	Ward et al., <i>Biochemistry</i> , <b>21</b> :4535-4540 (1982)
ВҮ	Ward et al., Photochem Photobiol., <b>35</b> :803-808 (1982)
BZ	Ward in Bioluminescence and Chemiluminescence (eds DeLuca et al., 235-242 (Academic Press, NY, 1981))
CA	Yang et al., Nature Biotechnology, 14:1246-1251
СВ	Yokoe and Meyer, Nature Biotech, <b>14</b> :1252-1256 (1996)
СС	Zolotukhin et al., 4646-4654 (1996)

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Т	Examiner		Date	'
1	Signature	<u></u>	Considered	

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